

5

**Claims**

1. Food and feed supplement containing vitamins, comprising at least one carboxylic acid and/or its salt as the basic ingredient of the supplement and the B<sub>6</sub>, B<sub>9</sub> and B<sub>12</sub>-vitamins in amounts of 10-50 mg/gram dry weight of the supplement, and 5-25 mg Fe/gram dry weight of supplement, 0-1 weight% desiccant, and 0-1 weight% of an antioxidant, and that the amount of salt and carboxylic acids will give an pH of 2.0-6.0 when the supplement is dissolved in water.
2. Supplement according to claim 1, characterized in that the amount of the vitamins B<sub>12</sub> and B<sub>9</sub> at least corresponds to that which can be consumed during the metabolism of the COOH-group of the carboxylic acids.
3. Supplement according to claim 1, characterized in that the amounts of the vitamins B<sub>6</sub>, B<sub>9</sub> and B<sub>12</sub> are in the range of 0,5-30mg, 0,1-10mg and 1-1500µg/gram dry weight of the content of the pure carboxylic acids in the supplement, respectively.
4. Supplement according to claim 1, characterised in that it contains 0.5-3.5 weight% iron fumarate.
5. Supplement according to claim 1, characterized in that the supplement contains vitamin E as antioxidant.
6. Supplement according to claim 1, characterized in that it contains an desiccant, preferably MgO.

7. Supplement according to claim 1,  
characterized in that the carboxylic acids are C<sub>1-8</sub> carboxylic acids.

5

8. Use of supplement according to claim 1-7, for improving the  
performance during stress and competition conditions, in amounts of  
0.5-15 grams dry supplement/kg dry feed.

10

9. Use of supplement according to claim 1-7 in the feed for horses by  
admixing 1-15 grams dry weight of the content of the pure carboxylic  
acids in the supplement/100kg horse weight in the standard feed for  
horses.

15

10. Use of supplement according to claim 1-7 in the food for humans by  
administration of 0,1-4,4 mg daily intake of the dry weight of the  
content of the pure carboxylic acids in the supplement per kilogram  
bodyweight.

20

25

30